

## HOW TO BUILD A STEEL PARTITION WALL SYSTEM

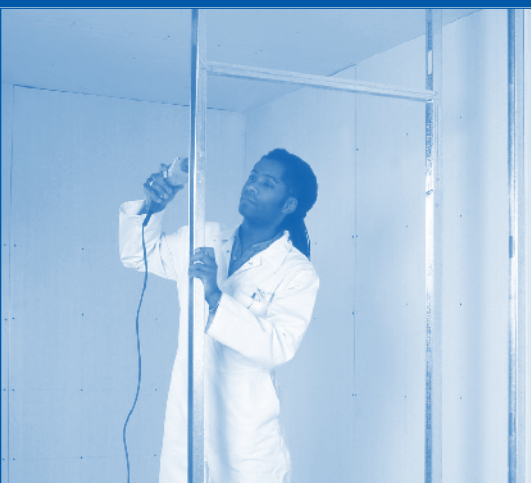
Dividing a room or garage with a wall partition can transform your home by adding valuable living space for you and your family to enjoy.

Choose to create a study, a playroom, an office or utility room, or add an en suite shower / bathroom to

an existing bedroom – the possibilities are endless.

A Wickes non-load bearing steel partition wall system is easy to install and is fitted on either side with plasterboard which reduces noise and improves insulation, making your fantastic new space functional and comfortable.

By using the help and advice offered in this easy to follow Good Idea Leaflet, along with the manufacturers instructions, creating a new room really couldn't be simpler.



Wickes steel stud partition walling is easily constructed using two metal profiles, either a 52mm or 72mm wide channel section, which are fixed to the floor and ceiling, and 50mm or 70mm wide stud(s), which are cut to length to fit vertically between the floor and ceiling channels.

Fitted to either side of the framework are 12.5mm boards (listed below). These are screwed in place with Wickes Drywall Screws, which self-cut into metal without the need for pilot holes. Construction is extremely quick and easy. The system uses only a small amount of timber, to support doors, heavy wall-mounted items, or as a means to provide a level base when fixing to uneven floors.

This system can be used in rooms up to 3.2m (10' 6" approx.) high.

### TOOLS

A plumb bob and line, a spirit level, tin snips or hacksaw, a cordless screwdriver, a craft knife, an old saw and a straight edge.

### IMPORTANT

You should contact your Local Authorities' Building Control Department, who will advise you if your project requires building control approval (new builds and most conversions will) and if so, what their requirements are. These could be for thermal insulation, acoustic performance, fire protection etc. and could save you any problems when you wish to sell the property at a later date.

### EXAMPLE:

A typical partition wall of 3 x 2.7m (w x h) will need:

163-574	2 x 3m Lengths of Wickes 52mm U Channel *
163-572	6 x 2.7m Lengths of Wickes 50mm C Stud *
163-579	1 x Pack Wickes Nailable Plugs
510-139	1 x Pack Wickes Drywall Screws
163-578	1 x Pack Wickes Wafer Head Screws
Listed below	8 x 12.5mm Boards (listed below)
220-215	1 x 150m Plasterboard jointing tape
224-995	1 x 10kg Jointing Compound

\*If increased strength and/or performance is required, use:

163-575 - 72mm channel and 163-573 - 70mm studs

163-653	Plasterboard Square Edge	1800 x 900 x 12.5mm
220-210	Plasterboard T Edge	2400 x 1200 x 12.5mm
224-651	Plasterboard T Edge	2700 x 1200 x 12.5mm
190-539	Fireshield T Edge	2400 x 1200 x 12.5mm
190-540	Moistureshield T Edge	2400 x 1200 x 12.5mm
224-657	Soundshield Board	2400 x 1200 x 12.5mm

Only available from selected stores

Note: Wickes also stock a range of Insulation products that can be used within the system.

### KEEP INFORMED

- Look for other Good Idea Leaflets that could help you with your current project.
- Check that your Good Idea Leaflets are kept up to date. Leaflets are regularly changed to reflect product changes so keep an eye on issue dates.
- If you would like to be put on our mailing list for the Wickes Catalogue call:  
**0845 274 1000**
- Visit our website  
**wickes.co.uk**

## BEFORE YOU START

Always check any lower joists are capable of supporting the Partition before construction starts.

## SAFETY

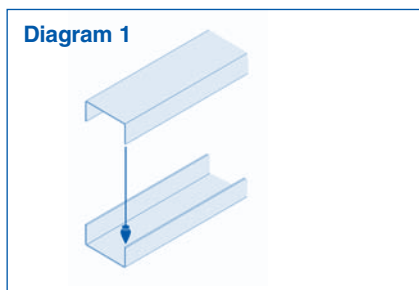
Both plasterboards and metal studs may need to be cut. This should be done in a well-ventilated area. Wear gloves and eye protection when handling, adding a face mask when cutting.

## 1. FITTING CEILING AND FLOOR CHANNELS

Start work by locating the position of the joists in the ceiling roughly where you want the partition to be. This can be done by carefully probing through the ceiling board with a bradawl, drill or screwdriver, until you feel the wood behind. Also check with a pipe and cable detector for wires or pipes and ensure that no fixings are used near these. If the joists run in the opposite direction to the intended new wall you will be able to fix the head track to each joist at maximum 600mm centres using Wickes Drywall Screws. The screws should penetrate the timber by at least 30mm.

If the joists run in the same direction you should slightly alter the new wall position so that it is directly under a joist and the head track can be fixed directly to it. If this is impossible, noggins (not supplied) must be fitted between the ceiling joists to enable fixings to be made. Generally head and floor channels must be fixed at a maximum 600mm centres.

When the head channel is fixed, drop a plumb bob and line down to the floor level from each end of the channel and mark the position of the bottom channel on the floor - **diagram 1**.

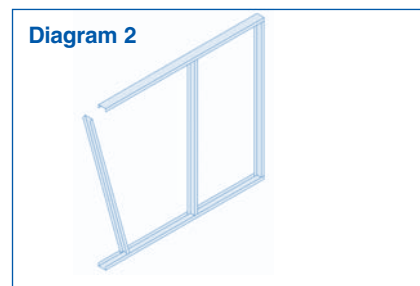


Screw the channel using Wickes Drywall Screws directly to a timber floor or drill, plug and screw using Wickes Nailable Plugs into a level concrete floor. The screws should penetrate the timber by at least 30mm. If a subfloor is particularly uneven it is recommended that a timber "sole plate" the width of the channel (52 or 72mm) and at least 30mm thick should be secured to the floor, and then the track to the timber. Pack the timber out as necessary to achieve a level base.

## 2. FITTING THE STUDS - diagram 2.

For ceiling heights up to 2.7m (8'10") - When the ceiling and floor channels are secured, the studs can be cut to length to fit between them, leaving 5mm clearance at the top of the studs. Measure and cut each stud separately, as there may be some variation

in room height. Cut excess from the same end of all the studs to ensure that the internal service slots remain on the same level. The studs are left floating and there is no requirement to fix using Wickes Wafer Head Screws prior to fitting the plasterboard. Only window and door details need to be fixed prior to the fitting of plasterboard.



## HIGH CEILINGS

For ceiling heights between 2.7m (8'10") and 3.2m (10' 6") - The vertical C-Stud can be 'boxed' (literally two pieces of stud joined to form a box profile), which can be used to extend the height of the partition beyond the height of the C-Stud profiles supplied. Tip: Off-cuts can be utilised in this way thus reducing any project waste.

## 3. FITTING THE BOARDS

Plasterboards are fitted to one side only to begin with, then the services are run through the studs on the other side before the second face is boarded. It is important to arrange boarding so that board joints on each side are not both to the same studs. Joints must, as far as possible, be staggered to give additional strength to the wall. This may mean you begin on one side with half a board width.

Cut all boards to about 6mm short of the ceiling to floor height. When fixed the boards should be tight to the ceiling with the gap at the bottom. This gap will be covered by skirting boards.

Board fixings should be made 10mm in from the edge of the board and at 300mm centres. Using a slow driver speed, simply locate the 38mm Wickes Drywall Screw against the board and carefully drive home.

**Note:** Stop when the screw head is just below the board surface but without breaking the paper. Secure to the intermediate studs in the same way.

**TIP:** The easiest way to cut plasterboard across its length or width is with a sharp Wickes craft knife and a straight edge. Mark the line of cut and against the straight edge, score the paper on one side of the plasterboard, bend the piece to be cut the opposite way and cut the paper on that side, the two pieces should separate easily.

If you need to remove a piece of the board, mark the area to be removed and cut using a saw but don't use your best one as the plasterboard will soon blunt it!

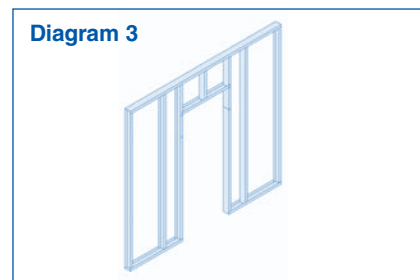
Cutting a hole for a socket or switch is simply a case of scoring around the area you wish to remove with a knife (easier if you can score

both sides) and then knocking the piece out with a hammer, but be careful, this requires a little practice.

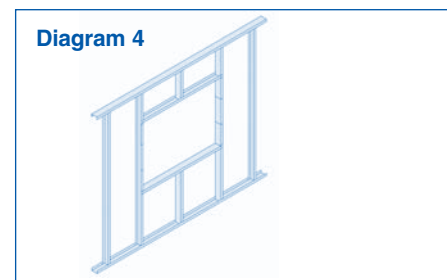
## 4. FITTING OPENINGS

Door and window openings are easily formed using the same channels as used at floor and ceiling and are constructed as follows.

**Door:** Cut a length of channel at a length equal to the door opening and width plus 600mm. Snip through both flanges at a point of 300mm in from each end, so you can bend the section 90° to form a "U" shape. This can be slotted over the studs at a suitable height and screwed as shown using the Wickes Wafer Head Screws - **diagram 3**. Use at least two Wickes wafer head screws each side.



**Window:** Prepare two lengths of channel in a similar way to that described for a door opening. These can be installed as shown in diagram to form a rectangular opening - **diagram 4**.



## 5. MAKING GOOD

The wall should be finished using Wickes jointing tape and plastering products.

Joint filling is done in two stages. First, using a 100mm wide filling knife, apply jointing compound to the board joints and, using plasterboard tape, cover the joints. This will not fill the joints to the surface but will create a base for a second coat to be applied when the first is dry. The second coat should be applied with a caulking tool and finished flush to the board surface. Fill screw head holes with the same compound. Sand smooth when dry to provide a surface ready for decorating. Prime the surface with PVA adhesive (diluted with 5 parts water to 1 part adhesive) or emulsion paint (diluted with 10% water) before decorating. Fit skirting boards at the base of the plasterboards. Wickes Forget Nails will make this much easier. Fit coving, to conceal wall to ceiling joins, if these have not been made good with jointing compound.

Whilst every care has been taken to ensure that the product design, descriptions, specifications and techniques of constructing the products are accurate at the date of printing. Wickes products will inevitably change from time to time and the customer is advised to check that the design, descriptions, specifications and techniques of constructing any of the products described in this leaflet are still valid at the time of purchase or placing an order.

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